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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/710,675	11/09/2000	Yutao Zhou	32576	4806

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EXAMINER

GEMMELL, ELIZABETH M

ART UNIT	PAPER NUMBER
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2882

DATE MAILED: 09/25/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/710,675

Applicant(s)

ZHOU ET AL.

Examiner

Beth Gemmell

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-9, 11-16, and 20-22 is/are rejected.
- 7) ☒ Claim(s) 9, 10 and 17 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 November 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>2</u> . | 6) <input type="checkbox"/> Other: . |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1-4,6,11, 13 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Walsh (US Patent 4,728,848).

Walsh discloses a reflector lamp comprising a glass shell (figure 1, 1), a base (figure 1, 6), a wire lamp (figure 1, 14), and a heat shield (figure 1, 19), the wire lamp being disposed within the glass shell, the glass shell having a concave inner surface and an outer surface (column 2, lines 8+), the glass shell having a thickness, the glass shell having a reflective coating disposed on the inner surface (figure 1, 18), the glass shell having a bottom, an opening at the bottom, a base extending from the bottom of the glass shell, the opening and the base defining a nose chamber (figure 1, 21), the heat shield being disposed substantially within or adjacent to the nose chamber (column 2, lines 30+).

Re claim 2: Walsh discloses the concave inner surface being substantially parabolic (column 2, lines 26+).

Re claim 3: Walsh discloses the heat shield positioned to substantially complete the parabolic inner surface (column 2, lines 30+).

Re claim 4: Walsh discloses the heat shield having a concave curved-shape (column 2, line 34).

Re claim 6: Walsh discloses the heat shield comprising a substrate and a reflective coating disposed on the substrate (column 2, lines 36+).

Re claim 11: Walsh discloses a reflective coating on the substrate comprising at least one metal selected from the group consisting of silver, gold, white gold, aluminum, and chromium (column 2, lines 36+).

Re claim 14: Walsh discloses the heat shield positioned below the opening at the bottom of the glass shell within 4 mm thereof (column 2, lines 30+).

2. Claims 1,2,7-9,15,16 and 20-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Zalar et al. (US Patent 5,057,735).

Zalar et al. discloses a reflector lamp comprising a glass shell (figure 1, 10), a base, a wire lamp (figure 1, 34), and a heat shield (figure 1, 60), the wire lamp being disposed within the glass shell, the glass shell having a concave inner surface and an

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outer surface, the glass shell having a thickness, the glass shell having a reflective coating disposed on the inner surface (figure 1, 20), the glass shell having a bottom, an opening at the bottom, a base extending from the bottom of the glass shell, the opening and the base defining a nose chamber (figure 1, 22), the heat shield being disposed substantially within or adjacent to the nose chamber (column 5, 32+).

Re claim 2: Zalar et al. discloses the concave inner surface being substantially parabolic (column 3,39).

Re claims 7, 8 and 9: Zalar et al. discloses the nose chamber having a plurality of holes disposed in the base thereof; wherein the number of holes is three; wherein two of the noles are adapted for the passage of ferrules therethrough (figure 1, 48 and 50), and one of the holes is adapted for the passage of an exhaust tube therethrough (figure 1, 54).

Re claim 15: Zalar et al. discloses a reflector lamp comprising a glass shell (figure 1, 10), a base, and a wire lamp (figure 1, 34), the wire lamp being disposed within the glass shell, the glass shell having a concave inner surface and an outer surface, the glass shell having a reflective coating disposed on the inner surface (figure 1, 20), the glass shell having a bottom, an opening at the bottom forming the top of a slot in the base, the opening having a major diameter and a minor diameter, the major

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diameter being substantially longer than the minor diameter (figure 1, 22), the wire lamp extending into the slot.

Re claim 16: Zalar et al. discloses the slot having three openings in the base thereof (figure 1, 48, 50 and 54).

Re claims 20 and 22: Zalar et al. discloses a reflector lamp comprising a glass shell (figure 1, 10), a wire lamp (figure 1, 34), and a flange (figure 1, 22), the wire lamp being disposed within the glass shell, the glass shell having a concave inner surface and an outer surface, the glass shell having a reflective coating disposed on the concave inner surface (figure 1, 20), the flange extending from the outer surface of the glass shell and defining a perimeter of a chamber, an extension of the glass shell extending over the chamber, the extension having an inner surface coated with a reflective coating (figure 1, 22), the extension having an opening therethrough in communication with the chamber; wherein the flange is integrally formed as part of the glass shell (column 3, lines 60+).

Re claim 21: Zalar et al. discloses a reflector lamp further comprising a glass cup attached to the flange extending from the outer surface of the glass shell, the glass cup comprising a base, a wall extending from the base at the perimeter thereof (figure 1, 22), and a plurality of openings extending through the closed base providing fluid connectivity between inner and outer surfaces thereof (figure 1, 48, 50, and 54).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 5 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Walsh in view of Inoue et al. (US Patent 4,433,271).

Walsh fails to disclose a reflector lamp wherein the heat shield comprises stainless steel.

Inoue et al. discloses the use of stainless steel for the heat shield (column 2, lines 51+).

One of ordinary skill in the art at the time the invention was made, would have been motivated to combine the apparatus disclosed by Walsh with that of a stainless steel heat shield because in using the stainless steel material more of the light and therefore heat would be reflected. In reflecting more of the light and heat, the components of the lamp are then kept cooler which in turn extends the life of the lamp.

Allowable Subject Matter

Claims 10, and 17-19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Beth Gemmell whose telephone number is (703) 305-1937. The examiner can normally be reached on Monday-Thursday 6:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Kim can be reached on (703) 305-3492. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

emg
September 23, 2002


ROBERT H. KIM
SUPERVISORY PATENT EXAMINER
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